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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/385,102	08/27/1999	TOSHIHIRO SHIMA	04783/008001	8708
22511	7590	12/29/2004	EXAMINER	
OSHA & MAY L.L.P. 1221 MCKINNEY STREET HOUSTON, TX 77010			PARK, CHAN S	
			ART UNIT	PAPER NUMBER
			2622	

DATE MAILED: 12/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/385,102	SHIMA, TOSHIHIRO	
	Examiner	Art Unit	
	CHAN S PARK	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5-7 and 15-17 is/are allowed.
- 6) ☒ Claim(s) 1-4, 8-14 and 18-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|-----------------------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. Applicant's amendment was received on 7/1/04, and has been entered and made of record. Currently, **claims 1-20** are pending.

Allowable Subject Matter

2. **Claims 5-7 and 15-17**, as currently amended, are allowed.

Response to Arguments

3. Upon review of the reference of Ueda (U.S. Patent No. 6,538,764), which was cited in the Office Action dated 4/8/04 under 35 U.S.C. 102(e), as being anticipating claims 1-4, 8-14 and 18-20, the examiner notes that the reference can still be interpreted as anticipating the claims, as currently amended.

Particularly, as amended, independent **claims 1, 8-11 and 18-20** now require a "communication control means for receiving packet data from host computers via a network." However, referring to col. 26, lines 53-57, Ueda clearly teaches that the printing apparatus is communicable with the host computer through a network.

4. Applicant's arguments filed 7/1/04 have been fully considered but they are not persuasive.

In response to applicant's arguments regarding the rejection of independent **claims 1, 8-11 and 18-20**, wherein on pages 13 and 14, the applicant explains how the

Art Unit: 2622

current invention differs from the teaching of Ueda. Particularly, the applicant states that the current invention has, for example, communication control means for receiving packet data from host computers and extracting print job from the packet data. Further, the applicant states that Ueda fails to suggest or disclose packet or packet data.

Examiner respectfully disagrees. Specifically referring to figs. 3 and 18 of Ueda, Ueda clearly teaches that a page of received print data is made up of blocks, bundles, or packets of data (301-316). Moreover, when a page of the received document data (packet data shown in fig. 3) is converted to intermediate data (print data shown in fig. 4 and col. 22, line 57 – col. 23, line 21), it is noted that the header code 301 and footer code 316 present in the packet data (fig. 3) are no longer present in the intermediate data (fig. 4). Thus, it is concluded that the print data (blocks 302-315 of fig. 3) is extracted from the packet data. Moreover, when a packet of print data is sent from the host to the printer via a network (col. 26, lines 53-57), it is inherent that a specific network address or the like of the printer must be present in the packet of print data. Without the address information, the transferring/receiving of the packet of print data between the host and the printer, in a network, cannot be performed. Also, since this address information is not required for performing the printing process at the printer (fig. 4), the address information will be discarded and required printing information will be used for the printing process. Thus, again, the print data is extracted from the packet data.

Art Unit: 2622

5. Therefore, the rejection of **claims 1, 8-11 and 18-20**, as cited in the Office action dated 4/8/04, under 35 U.S.C. 102(e), as being anticipated by Ueda, is maintained and repeated in this Office action.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-4, 8-14, and 18-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Ueda.

6. With respect to claim 1, Ueda discloses a network printer controller (controller 2000 in fig. 1) comprising:

communication control means (CPU 12) for receiving packet data from host computers via a network and extracting print job data (intermediate codes) on the basis of the received packet data (col. 25, lines 10-16);

language control means (CPU 12) for generating image data on the basis of said print job data (col. 25, lines 25-32);

print control means (CPU 12 in conjunction with printing section 17) for controlling a print engine (col. 21, lines 52-56);

Art Unit: 2622

execution means (CPU 12) for exclusively executing either said communication control means, said language control means, or said print control means according to priorities assigned to each of these means (col. 25, lines 10-32); and

alternation means (CPU 12) for altering, on the basis of specific events (insufficiency of the intermediate code memory 501), the relative priority sequence based on the priority between said communication control means and said language control means (col. 25, lines 10-32 & col. 31, lines 52-65).

It should be noted that the CPU 12 controls the communication means and conversion means for converting the print data into image data (dot data) based the size of the remaining intermediate code memory. When a *sufficient* amount of memory is available, the CPU 12 gives the priority to the communication control means and performs the printing process in a following order: communication control means → language control means → print control means (col. 31, lines 52-65). However, when an insufficiency of the memory size is detected, instead of the communication control means, the priority is given to the language control means to free up the memory space (language control means → communication control means → language control means → print control means). Thus, altering the relative priority sequence between the communication control means and the language control means is inherently performed based on this specific event of memory capacity.

7. With respect to claim 2, Ueda discloses the network printer controller according to claim 1, further comprising:

a first memory (intermediate code memory) for storing the packet data received by said communication control means; and

first monitoring means (CPU 12 in col. 25, lines 16-18) for generating said specific events on the basis of the amount of packet data stored in said first memory (step 4 in fig. 5).

8. With respect to claim 3, Ueda discloses the network printer controller according to claim 2, wherein said alteration means raises the priority of said language control means higher than the priority of said communication control means when said first monitoring means decides that the amount of packet data stored in said first memory is below a specific value (selecting "Y" at step 4 in fig. 5). Note that the conversion is performed first when the memory is full.

9. With respect to claim 4, Ueda discloses the network printer controller according to claim 2, wherein said alteration means raises the priority of said communication control means higher than the priority of said language control means when said first monitoring means decides that the amount of packet data stored in said first memory is over a specific value (selecting "N" at step 4 in fig. 5). Note that receiving of print data from the host PC is performed first when the memory is not full.

10. With respect to claims 8 and 9, due to the similarities of these claims to claim 1, these claims are rejected as the reasons applied to claim 1.

11. With respect to claim 10, Ueda discloses a network printer comprising:

a controller (controller 2000);

a print engine for printing on a print recording medium (col. 31, line 59); and

Art Unit: 2622

a communication interface connected to a network such that communication with host computer is possible (col. 26, lines 53-57).

With respect to rest of the claim, arguments analogous to those presented for claim 1, are applicable.

12. With respect to claim 11, as noted above in claim 1, Ueda a network printer controller (controller 2000 in fig. 1) comprising:

communication control means (CPU 12) for receiving packet data from host computers via network and extracting print job data (intermediate codes) on the basis of the received packet data (col. 25, lines 10-16);

language control means (CPU 12) for generating image data on the basis of said print job data (col. 25, lines 25-32);

print control means (CPU 12 in conjunction with printing section 17) for controlling a print engine (col. 21, lines 52-56);

execution means (CPU 12) for exclusively executing either said communication control means, said language control means, or said print control means according to priorities assigned to each of these means (col. 25, lines 10-32); and

alteration means for altering, on the basis of specific events, the relative time proportions between the execution time in which said execution means is to execute said communication control means and the execution time in which said execution means is to execute said language control means (col. 25, lines 10-32).

Again, when CPU 12 detects an insufficiency of the memory, it alters the priority between the communication control means and the language control means (language control means → communication control means → language control means → print control means). Since the language control means is performed first instead of the communication control means due to the insufficiency of the memory size (specific event), the schedule *time* for the communication control means to be performed is inherently altered so that the language control means is performed first.

13. With respect to claim 12, Ueda discloses the network printer controller according to claim 11, further comprising:

a first memory (intermediate code memory) for storing the packet data received by said communication control means; and

first monitoring means (CPU 12 in col. 25, lines 16-18) for generating said specific events on the basis of the amount of packet data stored in said first memory (step 4 in fig. 5).

14. With respect to claim 13, Ueda discloses the network printer controller according to claim 12, wherein said alteration means raises the priority of said language control means higher than the priority of said communication control means when said first monitoring means decides that the amount of packet data stored in said first memory is below a specific value (selecting "Y" at step 4 in fig. 5). Note that the conversion is performed first when the memory is full.

15. With respect to claim 14, Ueda discloses the network printer controller according to claim 12, wherein said alteration means raises the priority of said communication

Art Unit: 2622

control means higher than the priority of said language control means when said first monitoring means decides that the amount of packet data stored in said first memory is over a specific value (selecting "N" at step 4 in fig. 5). Note that receiving of print data from the host PC is performed first when the memory is not full.

16. With respect to claims 18-20, due to the similarities of these claims to those of claims 10 and 11, these claims are rejected as the reasons applied to claims 10 and 11.

Conclusion

17. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

18. Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHAN S PARK whose telephone number is (703) 305-2448. The examiner can normally be reached on M-F 8am-4:30pm.


Art Unit: 2622

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

csp
December 15, 2004

Chan S. Park
Examiner
Art Unit 2622


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